

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-6. (Presently canceled)

7. (New) An antibody or antigen-binding fragment thereof which binds to a kinase or subunit thereof, wherein said kinase phosphorylates I κ B α (SEQ ID NO:9) at serine residues 32 and 36, the kinase being a complex of approximately 700 kDa molecular weight as determined by gel filtration chromatography or size exclusion chromatography.
8. (New) An antibody or antigen-binding fragment thereof which binds to a subunit of the kinase according to claim 7.
9. (New) The antibody or antigen-binding fragment thereof of claim 8 wherein said subunit is selected from the group consisting of p31, p33, p36, p38, p40, p43, p50, p55, p62, p70 and p85.
10. (New) The antibody or antigen-binding fragment thereof of claim 7, wherein said antibody or antigen-binding fragment thereof is an antigen-binding fragment is selected from the group consisting of an F(ab')₂ fragment, an Fab' fragment, an Fab fragment and an Fv fragment.
11. (New) The antibody or antigen-binding fragment thereof of claim 7, wherein said antibody or antigen-binding fragment thereof is selected from the group consisting of a polyclonal antibody, a monoclonal antibody, a single chain antibody, and a humanized antibody.
12. (New) A hybridoma which produces the monoclonal antibody or antigen-binding fragment thereof according to claim 11.
13. (New) The antibody or antigen-binding fragment thereof of claim 7, wherein said antibody or antigen-binding fragment thereof is detectably labeled.
14. (New) The antibody or antigen-binding fragment thereof of claim 13, wherein said detectable label is selected from the group consisting of a radioisotope, an affinity label, an enzymatic label, a fluorescent label and a paramagnetic atom.

15. (New) The antibody or antigen-binding fragment thereof of claim 7, wherein said antibody or antigen-binding fragment thereof is immobilized on a solid support.
16. (New) A method of detecting a kinase in a sample, comprising:
 - (a) contacting the sample with said antibody or antigen-binding fragment thereof according to claim 7, under conditions such that an immunocomplex forms, and
 - (b) detecting the presence of said antibody bound to said kinase.
17. (New) A method of detecting a kinase or subunit thereof in a sample, comprising:
 - (a) contacting the sample with said antibody or antigen-binding fragment thereof according to claim 8, under conditions such that an immunocomplex forms, and
 - (b) detecting the presence of said antibody bound to said kinase subunit.
18. (New) A diagnostic kit comprising:
 - (a) a first container means containing the antibody or antigen-binding fragment thereof according to claim 7, and
 - (b) a second container means containing a conjugate comprising a binding partner of said antibody or antigen-binding fragment thereof and a label.
19. (New) The diagnostic kit of claim 18, further comprising at least one container selected from the group consisting of a container comprising a wash reagent and a container comprising a detection reagent.
20. (New) A bioassay for assessing candidate drugs or ligands of a kinase or subunit thereof, wherein said kinase phosphorylates I κ B α (SEQ ID NO:9) at serine residues 32 and 36, the kinase being a complex of approximately 700 kDa molecular weight as determined by gel filtration chromatography or size exclusion chromatography, comprising:
 - (a) contacting a candidate drug or ligand with a sample containing said kinase or subunit thereof, and
 - (b) evaluating the biological activity modified by said contact, wherein a reduction in the amount of biological activity in the presence of the candidate drug or ligand indicates that the candidate drug or ligand is an inhibitor of kinase activity.

21. (New) The bioassay according to claim 20, wherein said biological activity comprises the amount of phosphorylated substrate that is produced.
22. (New) The bioassay according to claim 21, wherein the substrate is labeled I κ B α .
23. (New) The bioassay according to claim 20, wherein the ligand is an antibody or antigen-binding fragment thereof.
24. (New) A selective inhibitor or antagonist of the activity of a kinase or subunit thereof, wherein said kinase phosphorylates I κ B α (SEQ ID NO:9) at serine residues 32 and 36, the kinase being a complex of approximately 700 kDa molecular weight as determined by gel filtration chromatography or size exclusion chromatography.
25. (New) A method of treatment of a disease in a mammal requiring modulation of NF- κ B, comprising administering a therapeutically effective amount of the inhibitor of claim 24 to a mammal afflicted with said disease.
26. (New) The method of claim 25, wherein the disease is selected from the group consisting of inflammation, HIV infection, cancer sepsis, psoriasis, restenosis, and reperfusion injury.